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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/669,950

09/24/2003

Peter Renner

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01/12/2005

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EXAMINER

DOUGHERTY, ANTHONY T

ART UNIT

PAPER NUMBER

2863

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,950

Applicant(s)

RENNER, PETER

Examiner

Anthony T. Dougherty

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,6,7,9-13 and 18-25 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 3-5,8 and 14-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because items 1-3 in Figure 1 should be labeled with descriptive text labels. Someone looking at any drawing should be able to get some sense of what the drawing is about without in depth reading of the specification. This is especially important because examiners use the drawings to help them identify prior art. Note that it is to the applicant's advantage to make the drawings as helpful as possible to the examining corps, in order to ensure that her/his patent will be found and used as prior art against a possible future similar invention. The drawing that is put on the face of the patent is especially important, because it is the first one an examiner sees when viewing prior art. Since the examiner plans to choose Figure 1 for printing on the face of any patent that should issue from this application, the examiner is requiring the afore mentioned labels be inserted. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 6, 7, 9-13, and 18-25 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,339,257 to Layden et al.

With regard to claim 1 Layden et al. discloses a system for tracking changes in technical processes, machines or the like (see abstract) having measurement chains for acquiring measured data (see column 4 line 65 through column 5 line 20), having sensors and sensor lines (see column 4 line 65 through column 5 line 3), interpretation electronics (see column 5 line 21-32) having governing software (inherent to the computer processor used see column 5 line 25-26), with interdependent measured quantities combined into measurement groups (see column 7 line 7-18), validity conditions defined for the measured data and the measured data are utilized only if their validity condition are fulfilled (see column 12 line 31-47), and the measured data of the measurement groups are linked with reference quantities (see column 7 line 45-50).

With regard to claim 2, and applying the rejection of claim 1 above, Layden et al. discloses at least one of the validity conditions for the measured data is a value going higher or lower than a special measured value of a measured quantity or a value going higher or lower than a value that is calculated from a plurality of special measured values of a plurality of measured quantities (see column 12 line 31-47).

With regard to claim 6, and applying the rejection of claim 1 above, Layden et al. discloses at least one of the validity conditions for the measured data is defined by dependent measured quantities that are constant over a period of time (see column 12 line 43).

With regard to claim 7, and applying the rejection of claim 1 above, Layden et al. discloses the validity conditions for the measured data constitutes at least one setpoint value in the process (see column 12 line 43).

With regard to claim 9, and applying the rejection of claim 1 above, Layden et al. discloses at least one of the reference quantities is formed from a calculated quantity of a plurality of measured quantities of one of the measurement groups (see column 7 line 45-50).

With regard to claim 10, and applying the rejection of claim 9 above, Layden et al. discloses at least one of the reference quantities is formed from the mean of the dependent measured quantities of one of the measurement groups (see column 7 line 45-50).

With regard to claim 11, and applying the rejection of claim 1 above, Layden et al. discloses at least one of the reference quantities is equal to the measured quantity when a measurement group contains only one measured quantity (see column 7 line 45-55).

With regard to claim 12, and applying the rejection of claim 1 above, Layden et al. discloses a unique name is provided as identification for measurement groups and for data sets of measurement groups (see column 6 line 54-62).

With regard to claim 13, and applying the rejection of claim 1 above, Layden et al. discloses the standardized values of the same measurement group are compressed into standardized statistical values (see column 7 line 19-40).

With regard to claim 18, and applying the rejection of claim 13 above, Layden et al. discloses the standardized values of the last-acquired measured values are examined for malfunctions in the measurement chain in the acquisition of measured data and for suddenly occurring serious malfunctions (see column 8 line 29-35).

With regard to claim 19, and applying the rejection of claim 18 above, Layden et al. discloses a malfunction in the measurement chain in the acquisition of measured data is presumed if the comparison of the standardized value of the last-acquired measured value with the standardized value of the previously acquired measured value yields a value that cannot occur operationally (see column 8 line 29-35).

With regard to claim 20, and applying the rejection of claim 19 above, Layden et al. discloses the malfunctioning measurement chain is included in a warning list (see column 8 line 17-20).

With regard to claim 21, and applying the rejection of claim 18 above, Layden et al. discloses a serious operational malfunction is presumed if the comparison of the standardized value of the last-acquired measured value with the standardized value of the previously acquired

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measured values, which represents no malfunction in the instrumentation, yields a difference value whose magnitude exceeds a limiting value (see column 8 line 29-35).

With regard to claim 22, and applying the rejection of claim 21 above, Layden et al. discloses malfunctioning measurement chain is included in a warning list with high priority, an alarm is issued to the operating personnel and/or the installation is shut down (see column 8 line 3-35).

With regard to claim 23, and applying the rejection of claim 13 above, Layden et al. discloses a malfunction in the measurement chain in the acquisition of measured data is presumed if the range of variation of the standardized statistical values, with allowance for a tolerance, takes on a value greater than the previously acquired standardized statistical values (see column 8 line 29-35 & column 12 line 60-64).

With regard to claim 24, and applying the rejection of claim 23 above, Layden et al. discloses the malfunctioning measurement chain is included in a warning list with high priority, an alarm is issued to the operating personnel and the installation is shut down (see column 8 line 3-35).

With regard to claim 25, and applying the rejection of claim 1 above, Layden et al. discloses in case of malfunctions in the instrumentation, plausible substitute values, which will

make possible the continued operation of the installation under restricted conditions, are prepared (see column 13 line 11-13).

Allowable Subject Matter

4. Claims 3-5, 8, and 14-17 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the allowance of claims 3 and 4 is the inclusion of the limitation of a statistical quantity formed from either a dependent measured quantity or a combination of a plurality of dependent measured quantities, with a time period as base. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the allowance of claim 5 is the inclusion of the limitation of the validity condition for the measured data is a waiting time that begins upon a value going higher or lower than a measured value of a measured quantity. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the allowance of claim 8 is the inclusion of the limitation of the validity condition for the measured data is loading. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the allowance of claims 14-17 is the inclusion of the limitation of time values provided as basis for standardized statistical values. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,838,561 to Owen because it teaches diagnosing a malfunction of a process control system.

U.S. Patent No. 5,210,704 to Husseiny because it teaches a wearout monitor for predicting failure and life expectancy of a system.

U.S. Patent No. 5,561,610 to Schricker et al. because it teaches a system for indicating a fault condition in a machine.

U.S. Patent No. 5,365,787 to Hernandez et al. because it teaches a system for detecting faults in a machine.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony T. Dougherty whose telephone number is (571) 272-2273. The examiner can normally be reached on Monday through Friday from 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



atd



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